

## CHAPTER 3 - RESEARCH METHODS

In this chapter the author will discuss about the type of the research and methodology that is used to conduct this research is conducted to find out the impact of service excellence towards the guest satisfaction.

### 3.1 Type of research

This research is a quantitative research that uses questionnaire to collect the data. The type of research will be single linear regressions because; there is only one variable that effecting the dependent variable.

### 3.2 Scope of Study

This research is involving the study of service excellence and guest satisfaction. The primary data will gather trough the questionnaires that will be spread in Sepa Island on May for the guest who stayed at least one night in the resort.

### 3.3 Time Frame of Study

Table 2 Time Frame of Study

Date	Settlement
27 February 2017	Start Thesis
17 March 2017	Submission of Chapter 1
3 April 2017	Submission of Chapter 2
17 April 2017	Submission of Chapter 3
22 May 2017	Submission of Chapter 4
5 June 2017	Submission of Chapter 5
19 June 2017	Thesis submission to Examination Office

### 3.4 Research Process

**Start**

- Introduction (Chapter 1)
- Literature Review (Chapter 2)

**Definition Topic and Preliminary research**

Reading journal related to guest satisfaction and principles of service excellence

**Topic of The Research**

The Importance of Six Principals of Service Excellence towards Guest Satisfaction in Sepa Island

- Research Methodology (Chapter 3)

**Questions and Hypothesis formulations**

Formulating a proper research questions and hypothesis

- Research and Discussions (Chapter 4)

**Data Collection**

**Hypothesis Testing**

- Conclusions and Recommendations (Chapter 5)

**Wrapping Conclusions and Generate Recommendations**

Source: Author

### **3.5 Population and Sampling**

#### **3.5.1 Population**

Population is the whole object or totality of the object that is going to be researched. Population can be individual, groups, organization, community of people, community of animal, society, or things. (Neolaka, 2014). The population of this research will be the guests who are coming to Sepa Island.

#### **3.5.2 Sample**

Sample is a part of population that can represent the whole population. The sampling method for this research is random sampling (probability sampling) which giving the same amount of chance to everyone in the population. The sample of this research will be guests who come to Sepa Island who are staying for more than one night.

Since the number of sample is unknown, the total of the sample will be determined by using Proportion formula. There are a tolerant percentage of mistakes in Proportion formula. So, if researcher's guess is not exactly the same with the real number of sample, it will not be a problem because there are tolerant of mistake in the Proportion formula (Neolaka, 2014).

According to the data received from Sepa island management, the visitor of Sepa island reach 100-120 people per week. Since this research will be conducted for three weeks, it means the total population will be 500-600 people. The confidence level will be 90% and the margin of error will be 10%. By using proportion formula, the minimum required sample will be as follows:

$$n = \frac{z^2 \alpha / 2}{4e^2}$$

**Symbol definition**

n = Sample Size

Z= Z value

$\alpha$  = Standard deviation

e = Margin of error

Since the confidence level is 90%, with 10% maximum margin of error, the Z value will be 1.645. Therefore, the calculation will be:

$$n = \frac{1.645^2}{4 \times (10\%)^2}$$

$$n = \frac{2.71}{4 \times 0.01}$$

$$n = 67.65 > 68$$

By using this formula, the minimum sample size for this research will be 68 respondents.

### 3.6 Operational Variable

Variable	Indicator	Statement	Scale
Six principles of service excellence (X)	Attitude X1	1. Sepa Island employee greet you when you passing by	Likert
		2. Sepa Island employee are using proper words when they are having conversation with you	Likert
		3. Sepa Island employee have good overall attitude	Likert
	Attention X2	4. Sepa Island employee are paying attention when you asking for something you need/want	Likert
		5. Sepa Island employee does understand what are your needs	Likert
		6. Sepa Island employee sees and provide what you need/want before you asking for it	Likert
	Action X3	7. Sepa Island employee provides exactly what you need/want based on your request	Likert
		8. Sepa Island employee act professionally when they serve what you need/want	Likert
		9. Sepa Island employee can provide what you need/want with relatively short duration	Likert
	Ability X4	10. Sepa Island employee have the ability to fulfil your need/wants based on your request	Likert
		11. Sepa Island employee are able to communicate effectively with guests	Likert
		12. Sepa Island employee are able to provide reliable information based on your question	Likert
	Appearance X5	13. Sepa Island Employee using tidy and proper uniform while they are on duty	Likert
		14. Sepa Island Employee are appear to be tidy (haircut, fingernail, tidy, and clean)	Likert
		15. Sepa Island employee are confident when they having conversation with the guests	Likert
	Accountability X6	16. Sepa Island employee are reliable to provide your need/wants	Likert
		17. Sepa Island employee are able to take the responsible on what they have said, information that they provide, and action they have taken	Likert
		18. Things that Sepa Island have said, information that they provide, and action that they have taken are the best choice and are reliable	Likert

Variable	indicators	Statement	Scale
Guest satisfaction (Y)	Service quality Y1	19. overall service quality from the employee of sepa island are satisfying	Likert
	Quality of Product Y2	20. Quality of the product of Sepa Island (food, accommodation, facilities) are satisfying	Likert
	Price Y3	21. The price is reasonable and everything is worth the money that you spend	Likert
	Situation and condition Y4	22. The situation and condition at Sepa Island effecting your satisfaction	Likert
	Personal factor Y5	23. Your personal needs are able to fulfilled in Sepa Island	Likert

Table 3 Operational Variable

### 3.7 Data Sources

#### 3.7.1 Primary data

The data will be collected from giving questionnaire to the guest of Sepa island, in Sepa Island.

#### 3.7.2 Secondary data

The secondary data will be supported from reliable web sites, journals, interview and books that provides reliable data to support the study.

### 3.8 Data Collection

The method of data collection implied in this research is by using questionnaire. Questionnaire is the instrument that is selected to collecting the data collection because, this method could collect the data in a short time and will receive the best information according what the guest think and consideration based on the question in the questionnaire and what the guest feel and think about the real performance of the employee of Sepa Island.

There are several scaling technique known in the book of “Metode Penelitian dan Statistik” by Amos Neolaka and those scaling technique are Likert scale, Guttman scale, Differential scale, and Rating Scale (Neolaka, 2014).

1. Likert scale is used to measure the behaviour, someone’s perception or group of people to a social phenomenon.



2. Gutmann scaling technique is giving strict answers. Most of the time, the choice of answer is only yes or no, agree or disagree, or positive or negative.
3. Semantic differential, which is developed by Osgood. This scaling technique is to measure the behaviour but the form of the answer is not in the form of multiple choice or checklist. But, it is formed in a continuum line.
4. Rating scale is raw data that is received in a form of numbers then It is translated into qualitative understanding.

The technique that will be used for the questionnaire is done by giving some levels of scale or measurement based on Likert scaling technique.

Likert scale is used to measure the behaviour, someone's perception or group of people to a social phenomenon. The indicator or sub indicator will be used as the guidance to make items in the questionnaire in the form of statement or question. The answer of each item in the questionnaire will use Likert scale that has gradation of answer from strongly disagree to strongly agree (Neolaka, 2014). The author will use numeric scale to represent the choice of answer.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

### **3.9 Pre-Test and Post-Test**

#### **3.9.1 Pre-testing**

Pre-testing will be conducted before spreading the questionnaire to the sample. The questionnaire that will be spreaded for the pre-testing will be the same questionnaire that will be spreaded for the sample in Sepa island. Pre-testing is conducted to avoiding mistakes and error in each item of the question in the questionnaire.

The questionnaire will be spreaded for 30 respondents and the respondent will be those who have not visit Sepa island. The data collected from the pre-testing will be tested by using IBM SPSS program to make sure that the data are acceptable and able to proceed to the post-testing process.

#### **3.9.2 Post-testing**

Post-testing will be conducted after the result of the data from pre-testing is collected and is valid and reliable. The questionnaire will be spreaded to the sample in Sepa island and after the data is collected, it will be inputed to IBM SPSS program to make

sure that the data received are valid and reliable.

### 3.10 Classical Assumption Test

#### 3.10.1 Normality Test

Normality test is addressed to test whether in a regression model, distract variable or residual has normal distribution or not (Masinambuow, 2013). Normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. The most common normality test is using Kolmogorv-Smirnov test. The data is normal if the significance value is higher than or equal to 0,1.

$$P \geq 0.1$$

#### 3.10.2 Heteroscedasticity Test

Heteroskedasticity Test is addressed to test wheter in the regression model is found any differences of variance from a residual observation to another observation (Masinambuow, 2013). In this study, SPSS will be used to find out wheter the data is free from heteroscedasticity or homogenous. If the significance value is higher or equal to 0.1, means that the data is homogeneous.

$$P \geq 0,1$$

### 3.11 Simple Linear Regression

Simple linear regression is a linear regression than only has one independent variable and one dependent variable (Neolaka, 2014). This reseach is involving two variable, one dependent variable and one independent variable. Therefore, the method to test the hypothesis for this research is simple linear regression.

### 3.12 Chi Square Test

The Chi square test is a statistical test which measures the association between two categorical variables (Walker, The chi Square Test, 1995). The chi square test will be conducted to measure the rank of each indicator of the service excellence. Each of the indicators of sesrvic excellence will be tested to measure how much is the impact of each indicators of service excellence toward the guest satisfaction in Sepa Island.